Declassified in Part - Sanitized Copy Approved for Release 2012/11/15: CIA-RDP79B00873A002900020047-1 DATE Chief, Imagery Analysis Division, CIA 7 October 1966 INITIALS DATE REMARKS DIR DEP/DIR EXEC/DIR **TECH ADV** SPECIAL ASST ASST FOR P&M CH/SS ASST FOR OPS ASST FOR PA ASST FOR P&D Chief, Development Attn: Branch CH/CSD 25X1 CH/IPD CH/PD CH/PSD CH/TID CIA/IAD CH/DIA/XX-4 CH/DIA/AP-IP CH/SPAD LO/CGS/CIA LO/NSA

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IAD/OSS-224/66 7 October 1966

MEMORANDUM	FOR:	Chief.	Imagerv	Analysis	Division.	CIA

FROM:

Chief, Operations Support Staff, IAD/CIA

SUBJECT:

25X1

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25X1

1. On 23 September 1966,	and I accompanied
P&DS, to the	Our purpose was
to evaluate a new Diazo processing unit, designed	ed by which they proposed
to produce for the Rapid Interpretation Printer,	
order. As you know, we have experienced continu	
type RIPP; most of which center around failures	
ing from this unfortunate experience, redes:	
attempt to eliminate the causes of failure. De	sign changes include the fol-
lowing:	

- .
- a. Reducing the requirement for high ammonia pressure in the processing chamber. This necessitated providing both input and output slots near the bottom of the processor but eliminated the need for "pressure roller" seals, and the use of a desiccant.
- b. Use of a new type regulating valve which maintains the ammonia pressure in the processor at 1-4 lbs.
- c. New heat sinks to increase the temperature within the processing chamber.
- d. Providing additional "O" rings plus a wide (about 11") neoprene belt to guide the Diazo copies through the processor without jamming.
- e. Adding a double timing mechanism to automatically regulate the flow of ammonia into the processor during standby periods, i.e., ammonia may flow for a predetermined interval, say one minute, then be cut off for 30 minutes. This will conserve ammonia and eliminate a constant pressure build-up within the chamber.
- f. Adding a warning light to indicate a low water level in the water reservoir plus an automatic ammonia shut-off should the water supply fail to operate.
- g. Adding two counters to indicate (1) number of exposures made on the printer and (2) the elapsed "on" time of the processor.
- h. Provision for removing the complete processing unit from the table by removing four screws.

GROUP 1 Excluded from automatic downgrading and Declassified in Part - Sanitized Copy Approved for Release 2012/11/15 : CIA-RDP79B00873A002900020047-1

- i. Modification of the control panel to provide two spaces for storing Diazo materials.
- j. Although not on the test model, our units will include an incandescent light source in the print box for convenience in aligning the area to be printed, and an annotation to indicate the proper orientation of a Diazo sheet on the printer.
- k. Tests also indicated the need for the addition of "drive" rollers at the input and output slots. These will be added to production units and are to be externally mounted on the processor. By removing the drive rollers, the processing unit (less ammonia and water tanks) will fit into one of our steel fly-a-way boxes for possible transport to a field station.

<i>:</i>	2. During the course of the day, we ran several tests on the RIPP and made densitometer readings on the samples. The D-max (maximum density) ran about 1.76, with adequate tonal range. Samples did indicate two potential problems: (1) the appearance of occasional smudge marks - like those made by an eraser on a pencil, and (2) some "modeling" in the Diazo emulsion.	25X1
	intends to determine and eliminate the cause of the smudge marks, and to con-	•
	fer with regarding better quality control in their Diazo coating system.	25X1
•		0.5344
	3. Over-all the new processor was judged by and myself to be much superior to the prototype and on this basis instructed	25X1 25X1
	to proceed with production for our new units. The first of five (5) units is now scheduled for the week of 5 December with the others to follow within	25X1
	one month. When delivering the first unit, intends to pick up the prototype and return it to the factory for modifications for the new design.	25 X 1
	4. The attached Polaroid photos show the new processing unit set up on a test bench and indicate both the external and internal configurations.	
	5. We were able to spend about two (2) hours with	25X1
	Vice-President, at their High Ridge Road facility. After discussing their current efforts in the R&D field, we made a short tour of their laboratories, but learned nothing of particular significance to the IAD at this time.	25X1

25X1

Attachment

Six (6) Polaroid Photos

Distribution

Original - Addressee

1 - P&DS/Ch/DB

2 - OSS/IAD

SEGRET